

IN THE CLAIMS:

1. (currently amended) A method of fabricating an optical aperture, comprising the steps of:

providing an object having a substrate, at least one conical- or pyramidal-shaped tip wherein a face of pushing body is made to be opposed to an object for aperture formation comprising a tip in a conical or a pyramidal shape formed at a
disposed on the substrate, a at least one stopper arranged disposed on the substrate at a vicinity of the tip, and a an
optical shielding film disposed on formed at least above the tip to cover at least a portion of each of the stopper and the
tip; and

providing at least one pressing body;

disposing a surface of the pressing body in confronting relation to the object; and

displacing the pressing body to bring the surface of the pressing body into contact with the object so that a force component is directed to a front end of the tip to form an optical aperture at the front end of the tip.

~~wherein an optical aperture is formed at a front end of the tip by pushing the pushing body to the object for aperture formation by a force having a component directed to the tip.~~

2. (currently amended) A method of fabricating an optical aperture, comprising the steps of:

providing an object having a substrate, a conical- or pyramidal-shaped tip disposed on the substrate, and an optical shielding film disposed at least on the tip;

providing a pressing wherein a pushing body having a main surface and a stopper projecting from the main surface; projected in a direction of an object for aperture formation is made to be opposed to the object for aperture formation comprising a tip of a conical or a pyramidal shape and a optical shielding film formed at least on the tip; and

disposing the main surface of the pressing body in confronting relation to the object; and

bringing the pressing body into contact with the object so that a force component is directed to a front end of the tip to form an optical aperture at the front end of the tip.

~~wherein an optical aperture is formed at a front end of the tip by displacing the pushing body by exerting a force having a component directed to the tip thereto.~~

3. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1, wherein claim 1;~~ wherein the at least one conical- or pyramidal-shaped tip comprises a plurality of conical- or pyramidal-shaped the tips; and wherein the bringing step comprises bringing the surface of the pressing body into pressure contact with the

object so that a force component is directed to a front end of each of the tips so that an optical aperture is formed at the front end of each of the ~~are formed and optical apertures are formed in one operation at front ends of the plurality of tips.~~

4. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~elaim 1, wherein~~ claim 1; ~~wherein the stopper controls the~~ is provided with a function of controlling a displacement of the ~~pushing pressing~~ body.

5. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~elaim 1, wherein~~ claim 1; ~~wherein the~~ pushing pressing ~~body is~~ made of a material ~~softer than a material of the tip.~~

6. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~elaim 1, wherein~~ claim 1; ~~wherein the surface of the pressing body comprises a portion of the pushing body brought into contact with the tip and the stopper constitutes~~ a substantially flat ~~surface face.~~

7. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~elaim 1, wherein~~ claim 1; ~~wherein the displacing step includes the step of applying a force on a portion of the pressing body disposed generally opposite the front end the force is operated to a portion of~~

~~the pushing body disposed substantially on an upper side of the front of the tip.~~

8. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1, wherein~~ claim 1; wherein the pushing pressing body is made of ~~comprises~~ an optically transparent material.

9. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 3, wherein~~ claim 3; wherein the at least one pressing body comprises a plurality of pressing bodies disposed on a structural member made of a soft material ~~the pushing bodies are provided on a soft structure member.~~

10. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1, wherein~~ claim 1; wherein the pressing body has a projection extending from the surface thereof; and wherein the disposing step comprises disposing the pressing body relative to the object so that the projection of the pressing body confronts ~~is formed at a face of the pushing body opposed to the tip.~~

11. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1, wherein~~ claim 1; wherein the pushing pressing body is made of a softer material than a material of the optical shielding film.

12. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1~~, wherein claim 1; wherein a height of the tip and a height of the stopper are substantially equal to each other.

13. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1~~, wherein ~~a difference is produced between the~~ claim 1; wherein a height of the tip and ~~the~~ a height of the stopper are different.

14. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1~~, wherein claim 1; wherein a difference between ~~the~~ a height of the tip and ~~the~~ a height of the stopper is selected so that the force component directed to a front end of the tip during the displacing step has a preselected magnitude ~~formed to constitute a desired distribution~~.

15. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 14~~, wherein claim 14; wherein preselected magnitude is selected ~~the distribution is a distribution~~ in accordance with a shape of the substrate.

16. (currently amended) ~~The~~ A method of fabricating an optical aperture according to ~~claim 1~~, wherein claim 1; wherein the pressing body and the substrate have substantially the same ~~a shape of the pushing body is a shape in correspondence with a shape of the substrate~~.

17. (currently amended) ~~The A~~ method of fabricating an optical aperture according to ~~elaim 1, wherein~~ claim 1; wherein the at least one conical- or pyramidal-shaped tip comprises a plurality of conical- or pyramidal-shaped tips and the at least one stopper comprises a plurality of stoppers disposed adjacent the tip; and wherein the bringing step comprises bringing the surface of the pressing body into pressure contact with the object so that a force component is directed to the front end of at least one of the tips so that tips adjacent to the at least one tip constitute the stoppers and the optical aperture is formed at the front end of the at least one tip ~~are formed and when the aperture is formed at one of the tips, the tips at a surrounding thereof function as the stoppers.~~

18. (currently amended) ~~The A~~ method of fabricating an optical aperture according to ~~elaim 17, wherein~~ claim 17; wherein the aperture is formed at the front end of at least one of the tips constituting one of ~~functioning as the~~ stoppers.

19. (currently amended) ~~The A~~ method of fabricating an optical aperture according to ~~elaim 1, wherein~~ claim 1; wherein the at least one conical- or pyramidal-shaped tip comprises a plurality of conical- or pyramidal-shaped tips and the at least one stopper comprises a plurality of stoppers projecting from the substrate and surrounding ~~are projected~~

~~portion regularly arranged around the tips; and wherein the~~
optical shielding film is formed on the stoppers at least
~~above the projected portions.~~

20. (currently amended) ~~The~~ A method of fabricating
an optical aperture according to ~~claim 1, wherein claim 1;~~
further comprising a plurality of very small structural
members arranged at periodic intervals ~~are provided~~ at a
vicinity of the tip.

21. (currently amended) ~~The~~ A method of fabricating
an optical aperture according to ~~claim 20, wherein claim 20;~~
wherein the at least one stopper comprises a plurality of
stoppers; and wherein the stoppers constitute the stopper
~~includes the periodic very small structural members.~~

22. (currently amended) ~~The~~ A method of fabricating
an optical aperture according to ~~claim 20, wherein claim 20;~~
wherein the periodic very small structural members are
disposed fabricated between the stopper and the tip.

23. (currently amended) A method of fabricating a
probe for a near field light device, the said method
comprising the steps of:

forming on a substrate a step of fabricating a least
one probe tip for transmitting light having a preselected
desired wavelength ~~on a substrate;~~

forming a step of fabricating a stopper on the

substrate so as to surround ~~arranged at a surrounding of the~~
probe tip:

~~a step of forming a optical shielding film~~ covering
the probe tip with an optical shielding film; and

providing a pressing body having a generally flat
surface portion; and

~~a step of~~ forming an optical aperture at a front end
of the probe tip by exerting a force simultaneously to the
probe tip and the stopper by using the flat surface of the
pressing body ~~a pushing body having a substantially flat face.~~

24. (currently amended) The A method of fabricating
~~a probe for a near field light device according to claim 23,~~
wherein claim 23; wherein the step of forming the at least one
probe tip comprises the step of forming a plurality of probe
tips on the substrate, the step of forming the stopper
comprises forming a plurality of stoppers each surrounding a
respective one of the probe tips, the covering step comprises
covering each of the probe tips with an optical shielding
film, and the step of forming the optical aperture comprises
forming an optical aperture at a front end of each of the
probe tips by exerting a force simultaneously to the probe
tips and the stoppers using the flat surface of the pressing
body ~~the substrate is cut and a plurality of the tips are~~
~~separated after forming the optical apertures at the front~~
~~ends of the tips.~~